

# SWIOCOF 14a – ECMWF and Space for Early Warning in Africa (SEWA)

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# Introductions





# ECMWF at SWIOCOF



COMMISSION DE  
L'OcéAN INDIEN

- Thank you to the IOC for the initiation!

First time attending SWIOCOF so we are here to:

- Listen and learn
- Introduce SEWA

We will also:

- Outline Copernicus data and tools (today at 1230; Chris Goddard)
- Overview ECMWF operational forecast system updates and data access (Wednesday 1100-1300 Session)

# Introduction to the Space for Early Warning in Africa (SEWA) project

# What is SEWA?

## Space for Early Warning in Africa

- Action under the Africa-EU Space Partnership Programme
- EU Global Gateway strategy, lead by EC's Director-General for International Partnerships (DG-INTPA)

**SEWA aims to 'co-develop space-based services and tools to strengthen Early Warning Systems of hazardous weather and climate-related events'**

[https://international-partnerships.ec.europa.eu/policies/programming/projects/space-early-warning-africa-sewa\\_en](https://international-partnerships.ec.europa.eu/policies/programming/projects/space-early-warning-africa-sewa_en)



# ECMWF within the SEWA project

Outputs	Role EUMETSAT	Role ECMWF	Role AUC
2.1 Improved access, processing, applicability and use of data and services for Early Warning	Shared	Shared	Support
2.2 Established and operated African Meteorological Satellite Application Facility (AMSAF)	<b><u>EUMETSAT lead</u></b>	/	Support
2.3 Enable co-design and delivery of Impact Based Forecast services & tools	/	<b><u>ECMWF lead</u></b>	Support
2.4 Enhanced coordination with institutional framework and shared knowledge across regions	Support	Support	<b><u>AUC lead</u></b>
2.5 Strengthened human capacities, knowledge and community shaping	Shared	Shared	Support



# A bit more detail....

Produce four regional impact-based forecast pilots for:

- Southern Africa (**including the Indian Ocean Islands**)
- Eastern Africa
- Western Africa
- Central Africa

Pilots will be developed through four grants following an initial scoping study

Co-design is a critical element...

[https://international-partnerships.ec.europa.eu/policies/programming/projects/space-early-warning-africa-sewa\\_en](https://international-partnerships.ec.europa.eu/policies/programming/projects/space-early-warning-africa-sewa_en)

# Co-design of the regional pilots

Priorities shall be based on the conclusions of an in-depth **scoping study** (ITT was released Friday 13 June)

For each region, the **two most relevant hazards** will be selected:

WMO EW4All priority hazards	Other 'Space' relevant hazards
flash floods	wildfires/smoke
drought/dry spells	dust storms
riverine floods	
tropical cyclones	
thunderstorms	
heatwaves	

<https://www.ecmwf.int/en/about/suppliers>

Use of data (not exhaustive):

- **ECMWF data products**
- **Copernicus** data: C3S, CAMS, CEMS (JRC), etc.
- **Nowcasting** data as provided through AMSAF (EUMETSAT)
- **LAMs** focusing on specific areas of interest in Africa



Development of the demonstration tools in **ECMWF's Cloud environment** (CCI – EWCloud)

Co-designed **training activities**

# Coordination in and between the grants

## Grant on Regional Pilot Western Africa

Co-beneficiaries to be included: **AGRHYMET** and **ACMAD**

## Grant on Regional Pilot Eastern Africa

Co-beneficiaries to be included: **ICPAC** and **ACMAD**

### Coordination on topics of common interest:

- **ECMWF** for technical/scientific aspects
- **AUC** for governance aspects

## Grant on Regional Pilot Central Africa

Co-beneficiaries to be included: **CAPC-AC** and **ACMAD**

Grant on Regional Pilot  
**Southern Africa**,  
incl. Indian Ocean Islands  
Co-beneficiaries to be included: **SADC-CSC** and **ACMAD**

**Each RCC will engage with the essential African entities in their region, incl. RSMCs**

**Working Group** to advise on the implementation: WMO AMCOMET, EUMETSAT, EC DG JRC

# Implementation through close partnerships

## Creation of African ownership

**Focus at regional level:** Eastern Africa (ICPAC); Western Africa (AGRHYMET); Southern Africa incl. Indian Ocean Islands (SADC-CSC); Central Africa (CAPC-AC).

Close engagements with **ACMAD** for inputs on all four regions

Each RCC would take the role to engage other essential African entities, incl. **RSMCs / selected African NMHSs**

**Mandate NMHSs on issuing EW** to be respected in line with WMO 1947 UN Convention of the WMO

**African Union Commission:** central role in governance.

## Enable European meteorological capacity

**European NMHSs and related partners** active in the domain of Early Warnings are expected to play central role to team up with African RCCs to implement regional pilots on impact-based forecasts and the training activities.

Use of **European Weather Cloud infrastructure:** capitalize on European investment to serve both African and European communities.

# Regional pilots – Process

Funding Opportunity  
Q2 2026

<b>Mechanism</b>	Competitive Call for Grants with aim to award 4 grants
<b>Max. budget</b>	~5mioEUR (actual amount can be slightly changed)
<b>Planning</b>	<p>Launch of Call early Q2 2026</p> <p>Start implementation of grants in Q4 2026</p> <p>Each grant is aimed to run for up to 30 months, an interim version of the regional pilots output is anticipated to be ready by Q4 2027.</p>

# ECMWF SEWA team

Scientific Officer  
***Katherine Egan***



Data and Cloud Support  
Specialist  
***Valters Zeizis***



Senior Grants Specialist  
***Laura Carletti***



**Karolin Eichler - SEWA  
Coordinator**

- We hope to have a SEWA page up and running later in the summer
- In the meantime, please feel free to email...

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